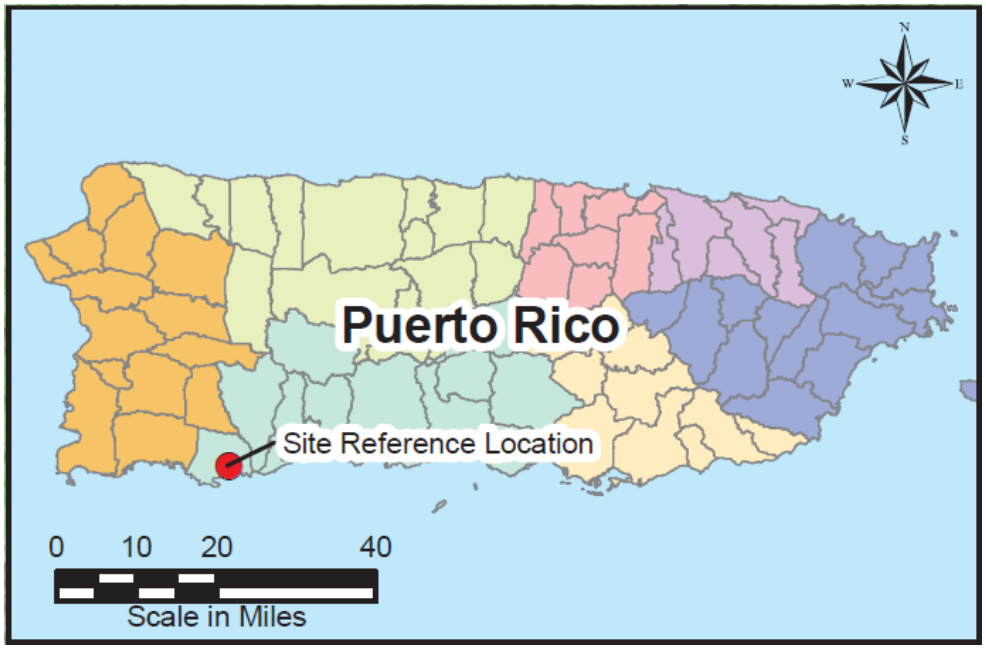
# Ochoa Fertilizer Co.
# Guánica, PR

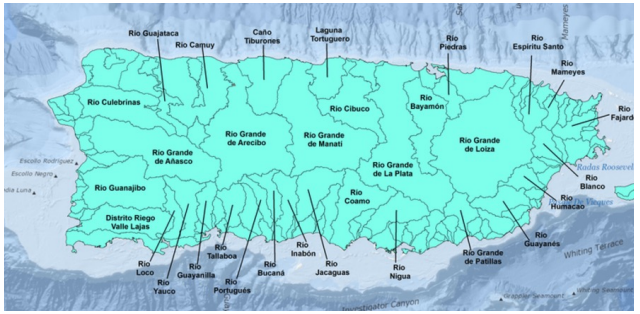


# Background: EPA's Work With Guanica Watershed

- **The United States Coral Reef Task Force—comprised of leaders from EPA and 11 other federal agencies along with select States, Territories, and Commonwealths—was established in 1998 to stem loses and preserve and protect coral reef ecosystems.**

- **A key strategy of the Task Force has always been to build partnerships with local communities to develop joint strategies that match conservation actions with local, on-the-ground conditions. An early priority was Puerto Rico's Guánica Bay, where the health of the reefs was under threat from deteriorating water quality from sediment and nutrient pollution flowing off of the surrounding watershed.**

- **To support that effort, EPA researchers have been leading and conducting studies to better understand the links between Puerto Rico's coral reefs, the water quality of Guánica Bay, and land use across the watershed. They have conducted systematic assessments of the health of the reef, quantified the flow of sediments and nutrients from the freshwater sources flowing into the Bay, and mapped land use patterns and habitat across the watershed and the island of Puerto Rico.**



# EPA's Work with Watersheds

- Technical and Compliance Assistance:
  - Urban Waters Partnership
  - Trash Free Waters Program
  - Support to Guánica Bay Pilot Projects (Guánica Treatment Wetlands)
- Grants:
  - Expected allocations for Clean Water State Revolving Fund (SRF), Brownfields Program, Environmental Justice, Environmental Education, Green Infrastructure, and Other EPA Grant Programs through Bipartisan Infrastructure Law, America Rescue Plan, and Proposed Social Spending Bill
- Research:
  - Biological Condition Gradient (BCG) for Puerto Rico and U.S. Virgin Islands Coral Reefs, others

**https://www.epa.gov/hwp**

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# EPA's Work with Watersheds

- **The Recovery Potential Screening Tool** - Screening for Land-Based Sources of Pollution that Stress Coral Reefs: can be set up to evaluate and compare watersheds for sediment and nutrient runoff into coral reef ecosystems.
- **EPA Resource Guide for Managers of Coastal Watersheds with Coral Reefs** provides a general overview of the most relevant EPA programs and tools that can help watershed managers address land-based sources of pollution that impact coral reefs.
- The **USCRTF Watershed Partnership Initiative Priority Ecosystem Indicators** document (PDF) provides coastal managers, coral reef managers, and watershed coordinators faced with modest budgets a suite of recommended ecological indicators and measurements to include in their watershed-specific monitoring plans.
- **USCRTF Watershed Partnership Initiative Programmatic Checklist**: A user-friendly checklist developed to help managers and watershed coordinators identify programmatic needs for the successful implementation of a ridge to reef watershed management plan.

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# EPA NPL Listing Process

- On September 8, 2021, the U.S. Environmental Protection Agency (EPA) announced it proposed adding the Ochoa Fertilizer Co. Guánica Site to the Superfund National Priorities List (NPL).

- The NPL includes the nation's most serious uncontrolled or abandoned releases of contamination. The list serves as the basis for prioritizing EPA Superfund cleanup funding and enforcement actions. Only releases at sites included on the NPL are eligible to receive federal funding for long-term, permanent cleanup.

- EPA proposes sites to the NPL based on the **relative threat that a site poses to people and the environment** a scientific determination of risks to people and the environment, consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan.

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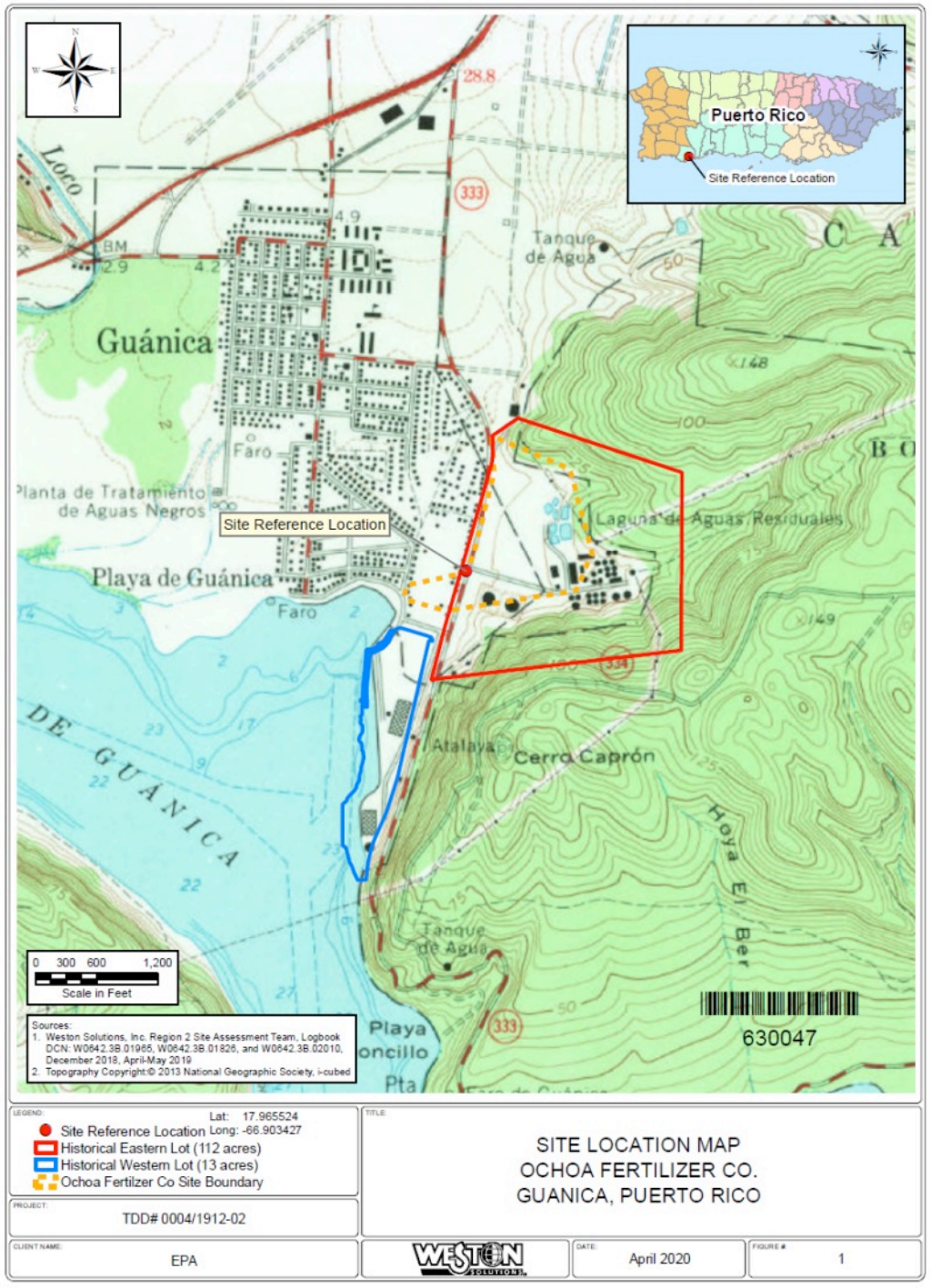
# Map:
# Ochoa Fertilizer Co.
# Guánica



# NPL Listing Process

EPA published a notice on the Federal Register.

Comments regarding the site had to be submitted (postmarked) on or before November 8, 2021.

A public repository was established in the Guánica Municipality (Mayor's Office). Documents are also available at: http://www.epa.gov/superfund/Ochoa-Fertilizer

# Site History

- **1957:** Gonzalez Chemicals Industries, Inc. began producing soil fertilizer on the western lot.
- **1960:** became Caribe Nitrogen Corporation (**CNC**), producing ammonium sulphate using anhydrous ammonium and sulfuric acid.
- **1964:** historic spill of sulfuric acid.
- **1968-1970:** ceased operations.
- **1977:** Ochoa Fertilizer operated from eastern lot, acquired assets of CNC and operated on both parcels. Carbon solids dredged from settling ponds for ammonium byproducts; solids buried on-site.
- **By ~1991:** On-site structures removed/demolished; becomes Ochoa Fertilizer Co., Inc.

# Why add this site to EPA's NPL?

- EPA sampled soil, groundwater, surface water, and sediments at the site and in Guánica Bay in 2019. The sampling results showed elevated levels of lead, polychlorinated biphenyl (PCBs), thallium, trichloroethylene (TCE), and vanadium. Mercury and Polycyclic Aromatic Hydrocarbons(PAHs) have also been detected in on-site soil.

# Why add this site to EPA's NPL?

The U.S. Environmental Protection Agency (EPA) is proposing to add the Ochoa Fertilizer Co. site in Guánica, Puerto Rico to the Superfund Program's National Priorities List (NPL) to determine the nature and extent of contaminated soil and groundwater, as well as potential impacts to drinking water and areas where vapor intrusion may occur. EPA's investigation will also ~~determine~~ evaluate impacts to Guánica Bay, including sediments.

# EPA Removal Program Sampling

- **May 2021:** soil sampling to evaluate potential overland flow of PCBs from the site proper to residences and impact to town's pumping station.
- 48 surface (0-2") soil samples from 14 properties on both sides of PR-333
- Challenges:
  - Area surrounding site impacted by Hurricane Maria and multiple earthquakes. Many residents relocated due to building damage.
  - Individual property boundaries not well marked/known. Town owns lot with majority of residences. Need to work with each property owner to identify historic, unofficial property boundaries.
- Aroclor-1260 detected at all sampling locations *(screening level 1.0 ppm)*
  - 26 locations on the right-of-way on eastern side (considered as one property)
    - Arcolor-1260 >1ppm at 12 of 26 locations, ranging from 1.0 J to 55 ppm
  - 19 locations on 13 properties on the western side:
    - **One (1) commercial property**, in front of abandoned gas station (2 locations): 6 ppm
    - **12 residential properties**; Arcolor-1260 >1ppm at 4 of 12 residences, ranging from 1.1-6.0 ppm
      - Five (5) for which we have signed access forms (2 locations/property, 10 total) – two >1ppm
      - Six (6) rights-of-way in front of residential properties (1-2 locations/property) – one >1ppm
      - One (1) open residential lot (2 locations) – 4.8 J – 5.2 J ppm
- Sediment from pump station contained **<**1ppm Aroclor-1260 and Aroclor-1242

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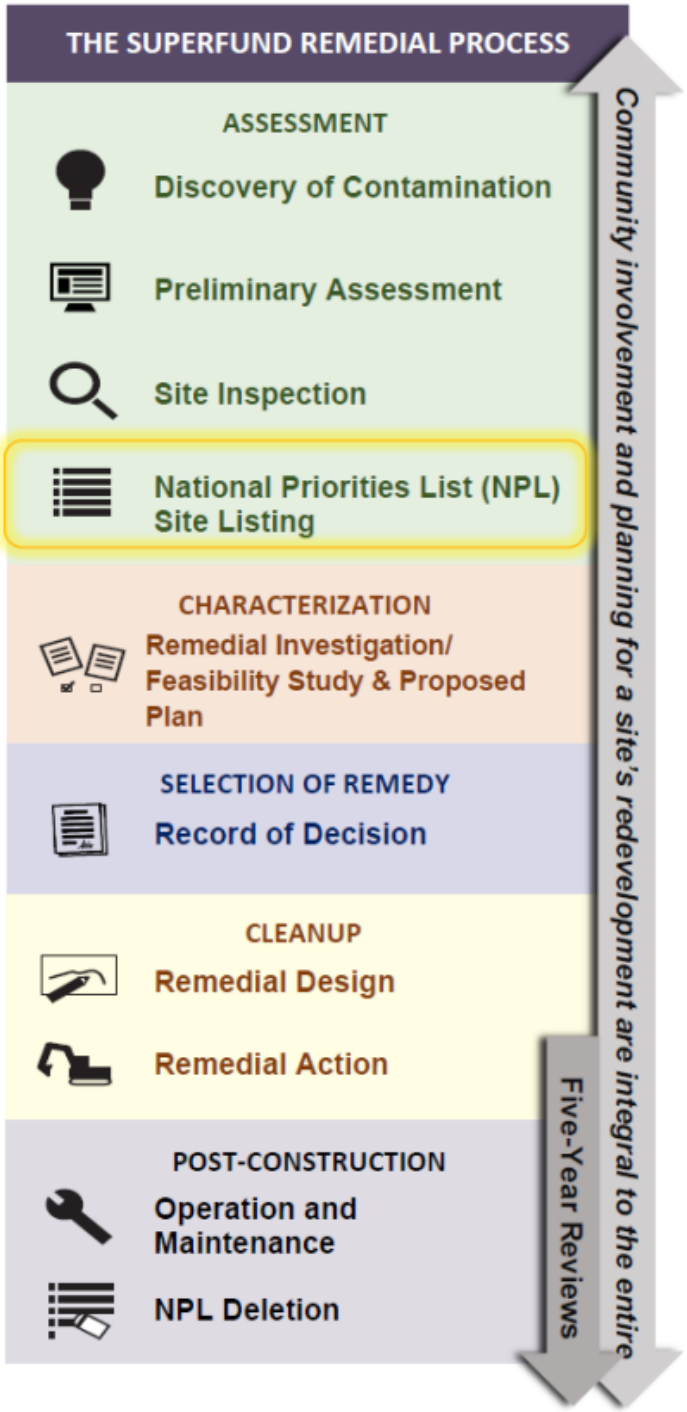
# SAMPLING PLAN

# What's Next?
## EPA's Removal Program Sampling Process

- EPA plans further sampling to determine the horizontal and vertical extent of PCBs in residential soil.
- Residents along PR-333 are encouraged to allow EPA to sample soil from their properties free of charge, and they will be provided with the sampling results
- EPA has been working with the Municipality of Guánica in identifying owners of vacant or abandoned lots.

# What's Next?
## EPA's Superfund NPL Remedial Process



# EPA Contact Information

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